(Y_{1-x} Ba_x)_a Cu_b O_y
wherein "x" is about 0.01 to 0.5;
"a" is about 1 to 2;
"b" is 1; and
"y" is about 2 to about 4.

15. A composition of matter containing a superconductive phase consisting essentially of a complex of Y, Ba, Cu and O, the Y, Ba, cu and O being in such proportions in the complex to provide the composition of matter with zero electrical resistance at a temperature of at least 77°K, said complex having a crystal structure uncharacteristic of the crystal structure of K₂NiF₄.

16. The composition of matter of claim 15, having the nominal composition

(Y_{1-x} Ba_x)_a Cu_b o_y
wherein "x" is about 0.01 to 0.5;
"a" is about 1 to 2;
"b" is 1; and
"y" is about 2 to about 4.

REMARKS

Upon review of the present application, it is believed that the above claims are appropriate for consideration in this application and are patentable over the prior art.

The broadest claim submitted, claim 13, differs over the prior art in specifying the composition of matter which is "superconductive" and which has the specified elements in such proportions as to provide zero electrical resistance at a temperature of 77°K or above. None of the

prior art discloses that invention. The other claims 14-16 are more specific than claim 13 and are therefore allowable for the same reason and further by reason of their additional limitations. For that reason, it is respectfully submitted that claims 13-16 are allowable.

Respectfully submitted,

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CERTIFICATE UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on Oct. 18, 1988, 1988.

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